

This listing of claims will replace all prior versions, and listings, of claims in the application.

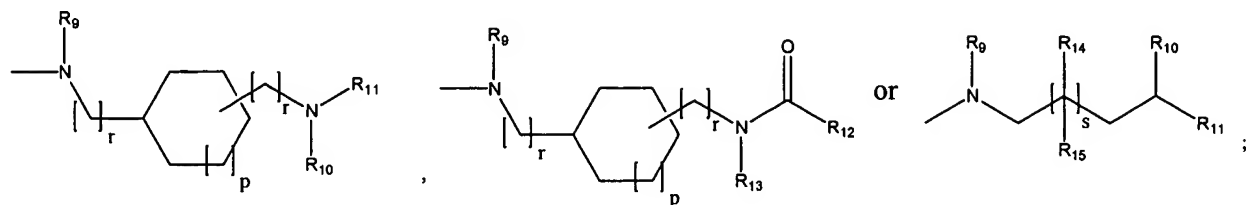
Claims 1-63. (Cancelled)

The chemical structure shows a benzothiazine core. It consists of a benzene ring fused to a six-membered ring containing two sulfur atoms (S) and a nitrogen atom (N). The nitrogen atom is part of a five-membered ring that also contains a sulfur atom (S) and a substituent R<sub>8</sub>. The benzene ring has a substituent (R<sub>1</sub>)<sub>4</sub> at the para position relative to the fusion point.

wherein each  $n$  independently is an integer from 0 to 6 inclusive;

wherein  $R_7$  is independently straight chained or branched  $C_1$ - $C_7$  alkyl;

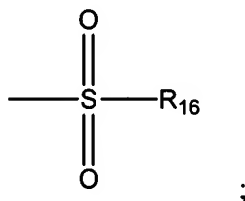
wherein  $R_8$  is



wherein  $R_9$  is independently H; or straight chained or branched  $C_1$ - $C_4$  alkyl;

wherein  $R_{10}$  is independently H; or straight chained or branched  $C_1$ - $C_4$  alkyl;

wherein  $R_{11}$  is



wherein  $R_{12}$  is H, straight chained or branched  $C_1$ - $C_7$  alkyl,  $-(CH_2)_uOR_{17}$ , or  $-O(CH_2)_uOR_{17}$ ;

wherein  $R_{13}$  is independently H;  $-(CH_2)_uOR_5$ ;  $-(CH_2)_tCONR_5R_6$ ;  $-(CH_2)_uNR_5COR_5$ ;  $-(CH_2)_tCOR_7$ ;  $-(CH_2)_tCO_2R_5$ ;  $-(CH_2)_uNR_5R_6$ ;  $-(CH_2)_uCN$ ; straight chained or branched  $C_1$ - $C_7$  alkyl;  $C_1$ - $C_7$  alkyl in which the  $C_2$ - $C_7$  atoms may be optionally substituted with one or more F or Cl;  $C_3$ - $C_7$  cycloalkyl- $C_1$ - $C_7$  alkyl; straight chained or branched  $C_2$ - $C_7$  alkenyl or alkynyl; or  $C_3$ - $C_7$  cycloalkyl; phenyl or  $C_1$ - $C_6$  phenylalkyl; wherein the phenyl or  $C_1$ - $C_6$  phenylalkyl may be substituted with one or more of F, Cl,  $-CN$ ,  $-NO_2$ ,  $-NR_5R_6$ ,  $-SO_2R_5$ ,  $-(CH_2)_nCOR_7$ ,  $-(CH_2)_nOR_5$ ,  $-(CH_2)_nCONR_5R_6$ ,  $-(CH_2)_nNR_5COR_5$ ,  $-(CH_2)_nCO_2R_5$ ,  $-(CH_2)_nSO_2NR_5R_6$ , straight chained or branched  $C_1$ - $C_7$  alkyl, perfluoroalkyl, polyfluoroalkyl, or aminoalkyl;

or  $R_{12}$  and  $R_{13}$  together with the amide linkage to which they are attached are pyrrolidinonyl, piperidinonyl or oxazolidinonyl;

wherein  $R_{14}$  is H; straight chained or branched  $C_1$ - $C_4$  alkyl; F; or  $-(CH_2)_tOR_5$ ;

wherein  $R_{15}$  is H, straight chained or branched  $C_1$ - $C_4$  alkyl, or F; with the proviso that when  $R_{14}$  is -OH,  $R_{15}$  cannot be F;

wherein  $R_{16}$  is perfluoroalkyl, unsubstituted straight chained or branched  $C_1$ - $C_7$  alkyl, substituted straight chained or branched  $C_2$ - $C_7$  alkyl, wherein the  $C_2$ - $C_7$  alkyl may be substituted with one or more of F, Cl, -CN, - $SO_2R_5$ , -  $(CH_2)_nCOR_7$ , -  $(CH_2)_nOR_5$ , -  $(CH_2)_nCONR_5R_6$ , -  $(CH_2)_nNR_5COR_5$ , -  $(CH_2)_nCO_2R_5$ , -  $(CH_2)_nOCF_3$ , perfluoroalkyl, polyfluoroalkyl, or aminoalkyl, straight chained or branched  $C_2$ - $C_7$  alkenyl or alkynyl, or  $C_3$ - $C_7$  cycloalkyl or cycloalkenyl; phenyl, heteroaryl, or  $C_1$ - $C_7$  phenylalkyl, wherein the phenyl, heteroaryl, or  $C_1$ - $C_7$  phenylalkyl may be substituted with one or more of F, Cl, Br, -CN, - $NO_2$ , - $NR_5R_6$ , -  $(CH_2)_nNR_5COR_5$ , - $SO_2R_5$ , -  $(CH_2)_nCOR_7$ , -  $(CH_2)_nOR_5$ , -  $(CH_2)_nCONR_5R_6$ , -  $(CH_2)_nCO_2R_5$ , -  $(CH_2)_nSO_2NR_5R_6$ , ethylenedioxy, methylenedioxy, straight chained or branched  $C_1$ - $C_7$  alkyl, perfluoroalkyl, polyfluoroalkyl, or aminoalkyl, straight chained or branched  $C_2$ - $C_7$  alkenyl or alkynyl, or  $C_3$ - $C_7$  cycloalkyl or cycloalkenyl; quinolinyl, 1-naphthyl, 2-naphthyl, or 2,1,3-benzothiadiazolyl; wherein the quinolinyl, 1-naphthyl, 2-naphthyl, or 2,1,3-benzothiadiazolyl may be substituted with one or more of F, Cl, Br, -CN, - $NO_2$ , - $NR_5R_6$ , -  $(CH_2)_nNR_5COR_5$ , - $SO_2R_5$ , -  $(CH_2)_nCOR_7$ , -  $(CH_2)_nOR_5$ , -  $(CH_2)_nCONR_5R_6$ , -  $(CH_2)_nCO_2R_5$ , -  $(CH_2)_nSO_2NR_5R_6$ , ethylenedioxy, methylenedioxy, straight chained or branched  $C_1$ - $C_7$  alkyl, perfluoroalkyl, polyfluoroalkyl, or aminoalkyl;

with the proviso that when  $R_8$  is  $NR_9(R_{14}R_{15})_sNR_{10}R_{11}$ ,  $R_{16}$  cannot be quinolinyl;

wherein  $R_{17}$  is H, straight chained or branched  $C_1$ - $C_4$  alkyl, perfluoroalkyl, or polyfluoroalkyl;

wherein each  $p$  independently is an integer from 0 to 2 inclusive;

wherein each  $r$  independently is an integer from 0 to 3 inclusive;

wherein each  $s$  independently is an integer from 1 to 6 inclusive;



wherein  $t$  is an integer from 1 to 4 inclusive; and

wherein each  $u$  independently is an integer from 2 to 4 inclusive;

or a pharmaceutically acceptable salt thereof.

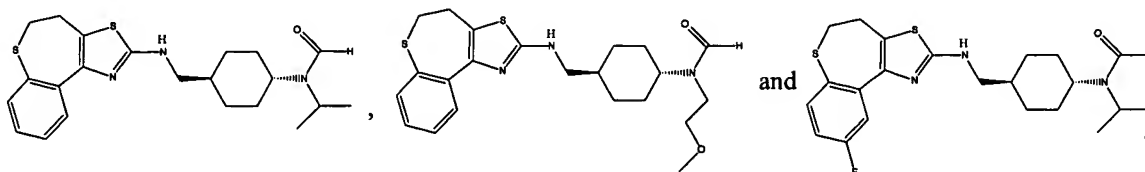
wherein R<sub>16</sub> is unsubstituted straight chained or branched C<sub>1</sub>-C<sub>7</sub> alkyl, phenyl, heteroaryl, or C<sub>1</sub>-C<sub>7</sub> phenylalkyl, wherein the phenyl, heteroaryl, or C<sub>1</sub>-C<sub>7</sub> phenylalkyl may be substituted with one or more of F, Cl, Br, -CN, -NO<sub>2</sub>, -NR<sub>5</sub>R<sub>6</sub>, - (CH<sub>2</sub>)<sub>n</sub>NR<sub>5</sub>COR<sub>5</sub>, -SO<sub>2</sub>R<sub>5</sub>, - (CH<sub>2</sub>)<sub>n</sub>COR<sub>7</sub>, - (CH<sub>2</sub>)<sub>n</sub>OR<sub>5</sub>, - (CH<sub>2</sub>)<sub>n</sub>CONR<sub>5</sub>R<sub>6</sub>, - (CH<sub>2</sub>)<sub>n</sub>CO<sub>2</sub>R<sub>5</sub> and - (CH<sub>2</sub>)<sub>n</sub>SO<sub>2</sub>NR<sub>5</sub>R<sub>6</sub>; and p is 1.

$$\text{---N(H)---[CH}_2\text{]}_s\text{---N(H)---R}_{11}$$

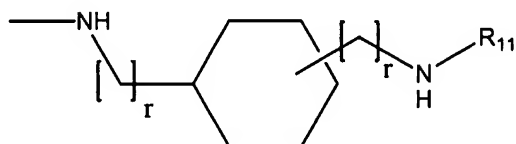



$$\text{---NH---} \left[ \text{---CH}_2\text{---} \right]_r \text{---} \text{C}_6\text{H}_{10} \text{---} \left[ \text{---CH}_2\text{---} \right]_r \text{---} \text{N} \left( \text{R}_{13} \right) \text{C} \left( \text{O} \right) \text{R}_{12}$$

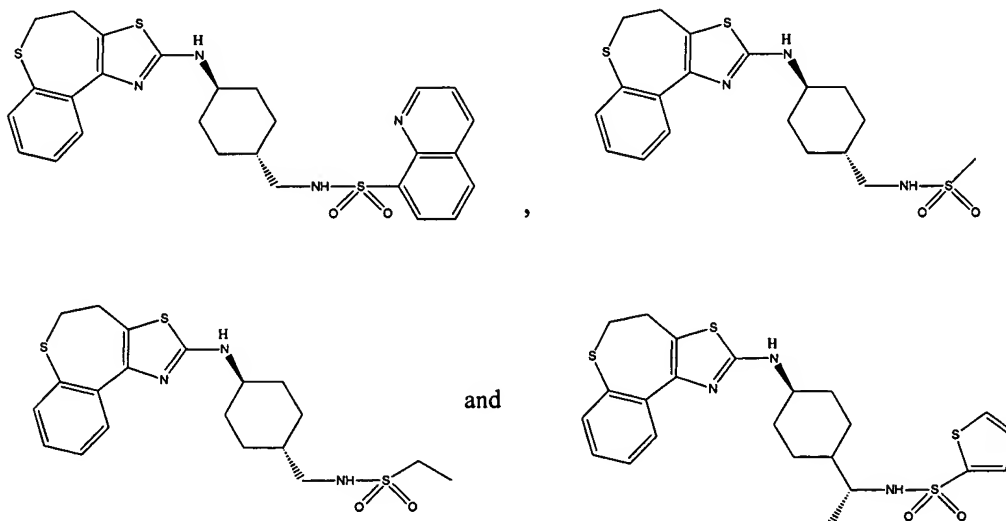
Claim 69. (Previously Presented) The compound of claim 68, wherein the compound is selected from the group consisting of:



**Claim 70. (Previously Presented)** The compound of claim 65, wherein R<sub>8</sub> is



Claim 71. (Previously Presented) The compound of claim 70, wherein the compound is selected from the group consisting of:



Claim 72. (Previously Presented) The compound of claim 64, wherein the compound is the (+) enantiomer.

Claim 73. (Previously Presented) The compound of claim 64, wherein the compound is the (-) enantiomer.

Claim 74. (Previously Presented) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 64 and a pharmaceutically acceptable carrier.

Claim 75. (Previously Presented) The pharmaceutical composition of claim 64, wherein the amount of the compound is an amount from about 0.01mg to about 800mg.

Claim 76. (Previously Presented) The pharmaceutical composition of claim 75, wherein the amount of the compound is an amount from about 0.01mg to about 500mg.

Claim 77. (Previously Presented) The pharmaceutical composition of claim 76, wherein the amount of the compound is an amount from about 0.01mg to about 250mg.

Claim 78. (Previously Presented) The pharmaceutical composition of claim 77, wherein the amount of the compound is an amount from about 0.1mg to about 60mg.

Claim 79. (Previously Presented) The pharmaceutical composition of claim 78, wherein the amount of the compound is an amount from about 1mg to about 20mg.

Claim 80. (Previously Presented) The pharmaceutical composition of claim 74, wherein the carrier is a liquid and the composition is a solution.

Claim 81. (Previously Presented) The pharmaceutical composition of claim 74, wherein the carrier is a solid and the composition is a tablet.

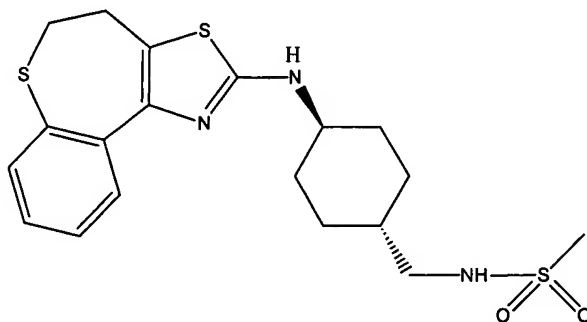
Claim 82. (Previously Presented) The pharmaceutical composition of claim 74, wherein the carrier is a gel and the composition is a suppository.

Claim 83. (Previously Presented) A pharmaceutical composition made by combining a therapeutically effective amount of the compound of claim 64 and a pharmaceutically acceptable carrier.

Claim 84. (Previously Presented) A process for making a pharmaceutical composition made by combining a therapeutically effective amount of the compound of claim 64 and a pharmaceutically acceptable carrier.

Claims 85-88. (Cancelled)

Claim 89. (New) The compound of claim 71, wherein the compound has the structure:



Claim 90. (New) A method of treating a subject suffering from an eating disorder, which comprises administering to the subject a therapeutically effective amount of the compound of claim 64 to treat the subject's eating disorder.

Claim 91. (New) A method of treating a subject suffering from an eating disorder, which comprises administering to the subject a therapeutically effective amount of the compound of claim 89 to treat the subject's eating disorder.

Claim 92. (New) A method of treating a subject suffering from obesity, which comprises administering to the subject a therapeutically effective amount of the compound of claim 64 to treat the subject's obesity.

Claim 93. (New) A method of treating a subject suffering from obesity, which comprises administering to the subject a therapeutically effective amount of the compound of claim 89 to treat the subject's obesity.

Claim 94. (New) A method of treating a subject suffering from depression, which comprises administering to the subject a therapeutically effective amount of the compound of claim 64 to treat the subject's depression.

Claim 95. (New) A method of treating a subject suffering from depression, which comprises administering to the subject a therapeutically effective amount of the compound of claim 89 to treat the subject's depression.

Claim 96. (New) A pharmaceutical composition comprising a therapeutically effective amount of the compound of claim 89 and a pharmaceutically acceptable carrier.